

RatingsDirect®

Massachusetts Water Resources Authority; Joint Criteria; Water/Sewer

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Credit Profile				
US\$224.13 mil gen rev rfdg bnds (Green Bnds) ser 2024C due 08/01/2043				
Long Term Rating	AA+/Stable	New		
US\$180.895 mil gen rev bnds (Green Bnds) ser 2024B due 08/01/2054				
Long Term Rating	AA+/Stable	New		
Massachusetts Wtr Resources Auth WTRSWR				
Long Term Rating	AA+/Stable	Affirmed		

Credit Highlights

- S&P Global Ratings assigned its 'AA+' rating to the Massachusetts Water Resources Authority's (MWRA) series 2024B general revenue bonds and 2024C general revenue refunding bonds.
- We also affirmed various ratings on numerous series of general revenue and refunding bonds issued by the authority, including our 'AA+' long-term rating and underlying rating (SPUR) on various series of MWRA's senior-lien debt, our 'AA' long-term rating and SPUR on various series of MWRA's subordinate-lien debt, our 'AAA/A-1+' rating on subordinate-lien debt jointly secured by MWRA and a letter of credit provider, our 'AA/A-1+ rating on subordinate-lien debt where the short-term ratings are based on the short-term rating on the counterparty providing liquidity support, and our 'AA/A-1' rating on subordinate-lien debt where the short-term rating on the counterparty providing liquidity support.
- The outlook on the bonds is stable, except for when joint criteria has been applied to the issue's long-term rating, in which case the outlook is not meaningful.

Security

A senior-lien net revenue pledge secures the senior-lien bonds and a subordinate-lien net revenue pledge secures the subordinate-lien bonds. The authority pledges all revenues--defined as all income, revenue, receipts, and other funds derived by the authority from its ownership and operation of the systems, combined with any existing rights to receive the same in the future, other than certain grant receipts and other funds--as security for the bonds. A debt service reserve requirement for senior bonds is 50% of maximum annual debt service (MADS). A covenant to set rates such that net revenue is at least equal to 1.2x annual senior-lien debt service and subordinate-lien bonds equal to 1.1x.

Credit overview

The ratings reflect a system-oriented wholesale analysis that primarily reflects the large and diverse service base of 62 local bodies providing water and sewer services in and around the Boston metropolitan statistical area (MSA).

Our system analysis is supported by MWRA's rate structure that provides for additional collection mechanisms through both a state aid intercept and, ultimately, an ability to reallocate uncollected assessments through a joint and several ability to increase assessments on the other local bodies. If these mechanisms were needed to be used by MWRA, we believe their robust liquidity could serve as a bridge to cover debt service payments pending receipt of

revenue from these mechanisms.

We believe that MWRA's rate structure is a significant mitigant to financial volatility because the authority's rates and charges are adopted annually and due from each local body in 10 equal monthly installments (excluding January and July). Assessments are essentially based on proportional flow or use and can be changed as needed through board approval. If a local body hadn't made these assessment payments when due, then MWRA's enabling act requires the authority to notify the state treasurer within 30 days, in which case the state treasurer pays to MWRA any amounts due from state aid otherwise payable to the local body. In addition, in an extreme case of a shortfall lasting 18 months, then MWRA's general bond resolution also allows it to assess other local bodies to make up the shortfall.

Other factors supporting the rating at its current level include generally consistent financial performance when considering unrestricted liquidity and coverage of total debt service costs, sophisticated and well-embedded operating and financial policies, counterparty diversification within MWRA's variable-rate portfolio, and a manageable capital improvement program (CIP), in our view, given the size of the system. Offsetting generally lower debt service coverage (DSC) for the current rating level is the strong revenue recovery mechanism described above and the overall strong credit quality of MWRA's local bodies.

MWRA's maximum CIP spending for its current 2024-2028 CIP is \$1.8 billion, exceeding the \$884 million plan that was in place from 2019-2023; management has represented that actual CIP spend has typically averaged about 75% of its cap.

Environmental, social, and governance

We believe MWRA faces elevated environmental risk due primarily to the need to remain in compliance with environmental regulations while maintaining large regional infrastructure that is subject to extreme weather events and climate vulnerabilities. That being said, the authority has extensive emergency planning and resiliency is built into its infrastructure. For example:

- Formal Watershed Protection Plans exist for its watershed areas;
- Ongoing capital projects for various deep rock supply tunnels and pump stations where diversion is possible without service interruption;
- · Its distribution reservoirs are all covered; and
- Programs are in place for detecting and repairing leaks, encouraging conservation and reduced water use, preserving and developing local supply sources, and implementing a drought response plan.

Monitoring per- and polyfluoroalkyl substances (PFAS) occurs in both its treated water and wastewater effluent. MWRA management also works with local bodies to review local data about PFAS levels. One benefit MWRA has is its regional nature, and it has a mechanism for connecting new bodies to its system if communities believe it is beneficial to serving their own water and sewer customers.

We believe that the most significant social and governance risks relate to management being able to continue generating overall positive variances on its current expense budget and in turn demonstrate actual revenue requirements lower than originally projected. Management will also need to continue its outreach efforts with the local

bodies served by MWRA so that, as additional rate increases are approved, the MWRA Advisory Board's advocacy for the authority's programs from the perspective of ratepayers remains aligned with management's overall goals.

Outlook

The stable outlook reflects S&P Global Ratings' view of the authority's financial position, as well as management's demonstrated willingness to increase rates. We expect that the authority will maintain financial metrics consistent with historical trends and will also continue to benefit from the diversity of the underlying economic base.

Downside scenario

If the authority can't maintain its financial stability supported by consistent rate increases or if the local units begin to experience difficulty paying their annual assessments, we could lower our rating on the bonds. However, given management's demonstrated willingness to implement rate increases and the broad and diverse economic base, we currently do not believe that MWRA's creditworthiness will be pressured in these ways in the next several years as long as management is able to manage its operating and fixed costs in a manner consistent with historical trends. If the current inflationary pressures were to become pronounced and lead to a heightened inability to raise rates due to regional affordability concerns, the rating could be lowered.

Upside scenario

We could raise the rating if MWRA consistently returned significantly stronger unrestricted liquidity and annual all-in coverage metrics.

Credit Opinion

Credit strengths focused on breadth of service territory and financial stability

MWRA is a regional, wholesale water and sewer services provider for about 45% of Massachusetts' population (about 3 million), including Boston and its MSA. The authority has statutory authority to serve 62 communities and currently serves 61. The Boston Water and Sewer Commission makes up about 30% of the authority's overall rates and charges revenue, which, in our view, lends stability to the rating on the MWRA bonds, given our 'AAA/Stable' rating on the commission's bonds.

Since 2015, combined water and sewer rates have risen from 3% to 4% annually, although significantly lower at 1% for fiscal 2021 to provide for some rate relief for local bodies. Current projections indicate that future increases will remain consistent with historical trends.

Financial operations have remained at least adequate, in our view. At the end of fiscal 2023 (June 30), net revenue provided all-in DSC (including senior-lien, subordinate-lien, and other fixed-charge obligations and capital leases and obligations paid to the Massachusetts Clean Water Trust) of 1.2x, a level we consider good. Net revenue has been calculated to include rates, charges, and interest earnings, but excludes transfers related to the rate stabilization fund. In addition, net revenue has been increased by noncash other postemployment benefit expenses and subordinated commonwealth payments. At fiscal year-end 2023, the authority's unrestricted current cash and investments were \$84 million. When adding a rate stabilization fund balance of \$39 million, total days' cash is 155.

These levels of coverage and unrestricted cash have been consistent with those of previous years, and management has indicated that, over the next several years, these financial metrics will not deviate significantly from the historical trends.

Debt service is the largest component of the budget, accounting for about 60% of audited operating and debt service expenses; while these figures are elevated, in our opinion, wholesale systems tend to have relatively high debt levels compared to retail systems and present less of a credit concern to us. For the variable-rate portion of its portfolio, MWRA currently budgets for a 4.75% average interest cost, which is well above the actual rate of about 4.06%, as indicated by management.

Variable-rate exposure mitigated through active management and contractual terms

Variable-rate debt represents 9% of the authority's outstanding portfolio (\$382 million), all of which is unhedged. Management has reported that it actively manages and reviews its liquidity and credit agreements. Given MWRA's large variable-rate portfolio and failed remarketings on any variable-rate bonds occur, these could also lead to fiscal stress, in our view. However, it is our understanding that most of the additional interest costs in the case of a failed remarketing would only occur after 90 days; we believe this provides the authority sufficient time to examine its financial options.

MWRA also has outstanding direct-purchase bonds issued in 2012, 2014, and 2018 with counterparties including Citibank N.A. (series 2012E), Bank of America N.A. (series 2014A), TD Bank N.A. (2018A), and US Bank (series 2018D). The security on all of MWRA's direct-purchase bonds is a subordinate-lien net revenue pledge. While we do not consider the existence of the direct-purchase bonds as introducing additional contingent liquidity risk at this time, our view on several provisions of these agreements is as follows:

- If an unsuccessful remarketing occurs, there is a term-out period of three years for any unremarketed bonds still
 outstanding. The term-out period starts at least six months after the date of any unsuccessful remarketing, which, in
 our view, provides an adequate period to achieve market access and refund the unremarketed bonds, if the
 authority believes it financially necessary to do this to avoid large debt service cost increases.
- A mandatory tender provision exists in all the supplemental indentures for any bonds outstanding on the agreement expiration date. It is our understanding that the timing of these agreement expirations is part of MWRA's larger variable-rate and counterparty management strategy. Management has ongoing experience renewing and extending liquidity and credit agreements, and expiring credit, liquidity, or direct-purchase agreements in any given year represent no more than 47% (in 2025; \$25 million has a final maturity in 2025) of the outstanding value of MWRA's total variable-rate portfolio in any given year. We expect the authority to continue managing the expiration of its various liquidity, credit, and direct-purchase agreements to avoid liquidity calls due to agreement expiration, as it has in the past.
- Occurrence of various events of default could lead to acceleration of direct-purchase bonds. While a payment default on the related refunding bonds, parity bonds, or other MWRA debt could cause an immediate or seven-day acceleration under all the purchase agreements, we view this acceleration risk as credit risk already incorporated into our long-term credit rating. However, acceleration caused by a covenant default (which includes various reporting and other requirements pursuant to the purchase agreements or related transaction documents) only occurs after an uncured period of 180 days. We believe that if acceleration occurs due to a covenant default, this 180-day period would be adequate for MWRA to achieve market access and refund the bonds subject to

acceleration, or achieve some other resolution to avoid acceleration.

• If our rating on MWRA's 2012E bonds falls below 'A-', the Citibank agreement allows for a 180-day cure period, similar to the other agreements. Since the rating on these bonds is more than two notches above the rating trigger, we do not consider the debt an immediate contingent liability under our contingent liability criteria.

MWRA also has a \$100 million revolving credit agreement with Bank of America N.A. that management has indicated it uses as a commercial paper program. We mention this agreement separately from the authority's other direct-purchase agreements because of the existence of several events of default provisions that we view as permissive. These include various material adverse clauses, no cure periods for covenant defaults, and cross-default provisions. An additional event of default is a downgrade below 'A-' or equivalent. If any of these events are triggered, there could be significant, downward pressure on the rating if MWRA does not maintain its market access to make full and timely payment on any accelerated amounts due under this agreement. The existence of these provisions is not currently having an effect on the rating since we view the likelihood of these nonpayment events of default occurring to be equal to the likelihood of a two-notch downgrade, which would still not result in a rating below the rating trigger on this agreement.

Related Criteria And Research

 Through The ESG Lens 3.0: The Intersection Of ESG Credit Factors And U.S. Public Finance Credit Factors, March 2, 2022

Ratings Detail (As Of May 21, 2024)				
Massachusetts Wtr Resources Auth multi modal subord gen rev				
Long Term Rating	AAA/A-1+	Affirmed		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed		
Massachusetts Wtr Resources Auth multi modal subord gen rev				
Long Term Rating	AA/Stable	Affirmed		
Massachusetts Wtr Resources Auth multi modal subord gen rev				
Long Term Rating	AA/A-1/Stable	Affirmed		
Massachusetts Wtr Resources Auth multi-modal subord gen rev				
Long Term Rating	AA/A-1/Stable	Affirmed		
Massachusetts Wtr Resources Auth multi-modal subord gen rev				
Long Term Rating	AA/A-1/Stable	Affirmed		
Massachusetts Wtr Resources Auth WTRSWR				
Long Term Rating	AA/A-1/Stable	Affirmed		
Massachusetts Wtr Resources Auth WTRSWR				
Long Term Rating	AA/Stable	Affirmed		
Massachusetts Wtr Resources Auth WTRSWR				
Long Term Rating	AA/Stable	Affirmed		
Massachusetts Wtr Resources Auth WTRSWR				
Long Term Rating	AA/Stable	Affirmed		

Ratings Detail (As Of May 21, 2024) (cont.)				
Massachusetts Wtr Resources Auth WTRSWR (AGM)				
Unenhanced Rating	AA+(SPUR)/Stable	Affirmed		
Massachusetts Wtr Resources Auth WTRSWR (AMBAC)				
Unenhanced Rating	AA+(SPUR)/Stable	Affirmed		
Massachusetts Wtr Resources Auth WTRSWR (MBIA) (National)				
Unenhanced Rating	AA+(SPUR)/Stable	Affirmed		

Many issues are enhanced by bond insurance.

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